

### REMARKS

The Office Action rejected claims 1-3, 5-10, 12-33, 37 and 38, and withdrew claims 34-36 from consideration as being independent and distinct from the invention originally claimed. By the foregoing amendment, claims 39 and 40 are added, no claims are amended and claims 34-36 are canceled to avoid excess claim fees. Claims 1-3, 5-10, 12-33, and 37-41 remain. Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

### **The Specification**

The foregoing amendment to the specification corrects a patent/clear error in hole diameter to read "between approximately 0.055" and 0.075"". See the attached declaration at paragraph 7.

### **Claim Rejections - 35 USC § 103**

The Office Action rejected claims 1-3, 5-10, 12-33, 37, and 38 as being unpatentable over U.S. Patent Number 6,394,793 to Bunge ("Bunge"). Applicant believes the rejection was improper and must be withdrawn. Specifically, Bunge fails to describe or to suggest all of the features of the claims.

With respect to claims, 1-3, 5-10, 12-30, 37, and 38 and the added claims, independent claims 1, 8 and 15 recite, *inter alia*, a step of "impingement cooling" and later define impingement cooling as a "subset of forced convection cooling that produces significantly higher heat transfer coefficients than the remainder of the forced convection regime." Bunge fails to disclose or to suggest such a feature. With respect to claims 31-33, independent claim 31 recites,

*inter alia*, that the "cooling step produces heat transfer coefficients greater than those created by oil bath quenching." Bunge fails to disclose or to suggest such a feature.

Relative to claim 31-33, the Office action noted the absence of a declaration under 37 CFR 1.132. Enclosed is such a declaration. That declaration evidences that the general impingement cooling of claims 1-3, 5-10, 12-30, and 37-41 and the specific heat transfer of claims 31-33 are not disclosed or suggested by Bunge.

New claims 39-41 identify a particular outlet diameter corrected above in the specification. Bunge does not disclose or suggest said diameter.

### Conclusion

In light of the foregoing, Applicants submit that the claims are now in condition for allowance. Applicants request that the Examiner reconsider and withdraw the rejection. Applicants solicit the allowance of Claims 1-3, 5-10, 12-33, and 37-41 at an early date.

Respectfully submitted,



William B. Slate  
Registration Number 37238  
Attorney for Applicants

Bachman & LaPointe, P.C.  
900 Chapel Street, Suite 1201  
New Haven, Connecticut 06510-2802  
Telephone: 203-777-6628 x 117  
Fax: 203-865-0297